

DISCUSSION OF THE AMENDMENTS

Claims 1 and 12-14 are currently amended.

Claims 2-7 are original.

Claim 8 is cancelled without prejudice or disclaimer.

Claims 9-11 and 15-18 were previously presented.

Upon entry of the amendment claims 1-7 and 9-18 will be active.

The amendments to claims 1 and 12-14 are supported on page 8, lines 35-40 of the specification.

No new matter has been added.

REMARKS

Applicants would like to thank Examiner Listvoyb for indicating that claims 4-6 and 16-18 would be allowable if rewritten in independent form.

The present disclosure involves a polyamide that contains chemically bound 1-amino-2-R-cyclopent-1-ene where R is a functional group capable of combining with an amino group to form an amide group. The moiety R is present at a level in the range from not less than 0.08 mol% to 2 mol%, based on 1 mole of acid amide groups of the polyamide. Applicants, submit that the cited references do not teach or suggest the recited concentration of R, and therefore, the cited references do not render the claims unpatentable under 35 U.S.C. §102(b) or §103(a).

The Office has rejected claims 1-3 and 8-15 under 35 U.S.C. §102(b) over Voit (U.S. Patent No. 6,278,023) as evidenced by encyclopedia of Pol. Sci. and Tech. (Polyamides, Fiber, Vol. 3, pages 592-594). The Office has also rejected claims 1-3 and 7-15 under 35 U.S.C. §102(b) over Ogo (U.S. Patent No. 6,117,942) as evidence by Voit.

Voit describes a method for producing aliphatic alpha, omega-diamines and describes utilizing the diamines in the production of nylon (a polyamide). Voit was concerned with removing unwanted impurities in diamines such as hexamethylenediamine (HMD) produced from adiponitrile. Voit noted that 1-amino-2-cyanocyclopentene (ICCP) may be formed as an unwanted by-product during the production of HMD. The Office then concludes that ICCP is always present in HMD and this unwanted impurity will be present in polyamides formed from HMD thus satisfying claim 1 of the present application. The Office also notes that Voit describes ICCP as being present in HMD at a level of 61 ppm. This level is approximately 0.006 mol% based on HMD.

Applicants note that even if one were to assume that the Office's analysis is correct, the most amount of ICCP that would be present in nylon would be about 0.006 mol% based on 1 mole of acid amide groups in the nylon. This level of ICCP is more than one order of magnitude greater than that recited in the claims (i.e., 0.08 mol%). Therefore, Voit does not teach or suggest all the recitations of the claimed polyamide or claimed process for preparing polyamides.

In addition, since Voit clearly states that ICCP is an unwanted impurity, Voit actually teaches away from its addition and thus Voit provides no motivation to add ICCP to polyamide compositions.

Therefore, claims 1-3 and 8-15 would not have been anticipated or obvious over Voit, and accordingly, Applicants respectfully request that the Office withdraw the rejection of claims 1-3 and 8-15 under 35 U.S.C. §102(b) over Voit.

Ogo describes a semiaromatic polyamide resin that may contain HMD (Example 1). The Office makes the same conclusion with regard to Ogo as it did above for Voit. For the same reasons as discussed above for Voit, Applicants submit that Ogo does not teach or suggest all the recitations of claims 1-3 and 7-15, and therefore, the claims would not have been rendered unpatentable under 35 U.S.C. §102(b) or §103(a). Accordingly, Applicants respectfully request that the Office withdraw the rejection of claims 1-3 and 7-15 under 35 U.S.C. §102(b) over Ogo.

In view of the above remarks, applicant believes the pending application is in condition for allowance. Favorable reconsideration is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 12810-00162-US1 from which the undersigned is authorized to draw.

Dated: January 8, 2008

Respectfully submitted,
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